

AMENDMENTS TO THE CLAIMS

1. (Cancelled)

2. (Cancelled)

3. (Cancelled)

4. (Cancelled)

5. (Cancelled)

6. (Cancelled)

7. (Cancelled)

8. (Cancelled)

9. (Cancelled)

10. (Cancelled)

11. (Previously Amended) A method of in situ testing a pressure transducer comprising the steps of:

measuring a first internal pressure in a fitting at a first internal volume of the fitting using the pressure transducer;

changing the internal volume of the fitting to a second internal volume to change the internal pressure to a second internal pressure;

measuring the second internal pressure in the fitting using the pressure transducer; and

comparing the measured first and second internal pressures to historical pressure readings.

12. (Previously Amended) The method of claim 11, wherein the step of changing the volume of the fitting further comprises the step of moving a piston located within the fitting.

13. (Previously Amended) A method of in situ testing a pressure transducer comprising the steps of:

measuring a first internal pressure in a fitting at a first internal volume of the fitting using the pressure transducer;

changing the internal volume of the fitting to a second internal volume to change the internal pressure to a second internal pressure;

measuring the second internal pressure in the fitting using the pressure transducer;

comparing the measured first and second internal pressures to historical pressure reading; and

sealing an input of the fitting prior to measuring the first internal pressure.

14. (Previously Amended) A method of in situ testing a pressure transducer comprising the steps of:

measuring a first internal pressure in a fitting at a first internal volume of the fitting using a pressure transducer;

changing the internal volume of the fitting to a second internal volume to change the internal pressure to a second internal pressure;

measuring the second internal pressure in the fitting using the pressure transducer;

comparing the measured first and second internal pressures to historical pressure readings; and

calculating a sensitivity, repeatability and hysteresis for the transducer using the measured internal pressures.

15. (Previously Amended) The method of claim 14, further comprising the step of calculating linearity of the transducer using the measured internal pressures and a measured temperature.

16. (Previously Cancelled)

17. (Previously Cancelled)

18. (Previously Cancelled)

19. (Previously Amended) A method of in situ testing a pressure transducer comprising the steps of:

measuring a series of first internal pressures in a fitting at a first volume of the fitting using the pressure transducer;

measuring a series of second internal pressures in the fitting at a second volume of the fitting using the pressure transducer; and

analyzing and comparing the measured series of first and second internal pressures to historical data.

20. (Previously Amended) A method of in situ testing a pressure transducer comprising the steps of:

measuring a series of first pressures in a fitting at a first volume of the fitting using the pressure transducer;

measuring a series of second internal pressures in the fitting at a second volume of the fitting using the pressure transducer; and

analyzing and comparing the measured series of first and second internal pressures to historical data;

wherein analyzing comprises determining sensitivity, linearity, hysteresis, or repeatability of the transducer.

21. (Previously Amended) The method of claim 19, wherein the first and second volumes of the fitting are determined by a position of an internal piston of the fitting.

22. (Previously Cancelled)

23. (Previously Cancelled)

24. (Previously Cancelled)

25. (Previously Cancelled)

26. (Previously Cancelled)

27. (Previously Cancelled)